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- (1) The name of the additive.
- (2) The maximum percentage of equivalent crude protein from the non-protein nitrogen.
- (3) Directions for use to provide not more than 20 percent of the additive in the total ration, and a prominent statement: "Warning—This feed should be used only in accordance with the directions furnished on the label."

§ 573.170 Ammonium formate.

The food additive, partially ammonium formate, may be safely used in the manufacture of complete swine feeds in accordance with the following prescribed conditions:

- (a) The additive is manufactured by the reaction of 99.5 percent ammonia gas and 99 percent formic acid in a continuous loop reactor to produce a solution made up of 37 percent ammonium salt of formic acid and 62 percent formic acid.
- (b) The additive is used or intended for use as a feed acidifying agent, to lower the pH, in complete swine feeds at levels not to exceed 1.2 percent of the complete feed.
- (c) To assure safe use of the additive, in addition to the other information required by the Federal Food, Drug, and Cosmetic Act (the act), the label and labeling shall contain:
 - (1) The name of the additive.
- (2) Adequate directions for use including a statement that ammonium formate must be uniformly applied and thoroughly mixed into complete swine feeds and that the complete swine feeds so treated shall be labeled as containing ammonium formate.
- (d) To assure safe use of the additive, in addition to the other information required by the act and paragraph (c) of this section, the label and labeling shall contain:
- (1) Appropriate warnings and safety precautions concerning ammonium formate (37 percent ammonium salt of formic acid and 62 percent formic acid).
- (2) Statements identifying ammonium formate in formic acid (37 percent ammonium salt of formic acid and 62 percent formic acid) as a corrosive and possible severe irritant.
- (3) Information about emergency aid in case of accidental exposure as follows:

- (i) Statements reflecting requirements of applicable sections of the Superfund Amendments and Reauthorization Act (SARA), and the Occupational Safety and Health Administration's (OSHA) human safety guidance regulations.
- (ii) Contact address and telephone number for reporting adverse reactions or to request a copy of the Material Safety Data Sheet (MSDS).

[75 FR 41725, July 19, 2010]

§ 573.180 Anhydrous ammonia.

- (a) The food additive anhydrous ammonia is applied directly to corn plant material and thoroughly blended prior to ensiling. It is used or intended for use as a source of nonprotein nitrogen in cattle feed in accordance with paragraphs (a)(1), (2), or (3) as follows:
- (1)(i) The food additive anhydrous ammonia is applied as a component of an aqueous premix containing 16 to 17 percent ammonia, with molasses, minerals, and not less than 83 percent crude protein. The premix is a source of nonprotein nitrogen and minerals.
- (ii) In addition to the requirements of paragraph (b) of this section, the labeling shall bear an expiration date of not more than 10 weeks after date of manufacture; a statement that additional protein should not be fed to lactating dairy cows producing less than 32 pounds of milk per day nor beef cattle consuming less than 1 percent of body weight daily in shelled corn; and a warning not to use additional trace mineral supplementation with treated silage.
- (2)(i) The food additive anhydrous ammonia is applied directly to corn plant material for use in dairy or beef cattle rations.
- (ii) The anhydrous ammonia is applied at a rate not to exceed the equivalent of 0.35 percent of the corn plant material.
- (iii) It is applied to corn plant material containing 30 to 35 percent dry matter.
- (iv) It is applied so that 75 to 85 percent of the additive is liquid at ambient pressure.
- (3)(i) The food additive anhydrous ammonia is applied after being diluted to a 15 to 30 percent aqueous ammonia solution (by weight).

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- (ii) The anhydrous ammonia solution is applied at a rate not to exceed anhydrous ammonia equivalent to 0.3 percent of the corn plant material.
- (iii) It is applied to corn plant material containing 28 to 38 percent dry matter.
- (iv) The silage treated with aqueous ammonia is to be fed to dairy cattle only.
- (b) Its labeling shall bear, in addition to the other requirements of the act, the name of the additive, the concentration of ammonia, the maximum percentage of equivalent crude protein from nonprotein nitrogen, and directions for use consistent with this section.

[44 FR 40284, July 10, 1979]

§ 573.200 Condensed animal protein hydrolysate.

- (a) Identity. The condensed animal protein hydrolysate is produced from the meat byproducts scraped from cured (salted) hides taken from cattle slaughtered for food consumption. The meat byproduct is hydrolyzed with heat and phosphoric acid.
- (b) *Specifications*. The additive shall conform to the following percent-by-weight specifications:

Moisture, not less than 45 percent nor more than 50 percent.

Protein, not less than 24 percent. Salt (NaCl), not more than 15 percent. Phosphorus, not less than 2.25 percent.

- (c) *Uses*. It is used or intended for use as a source of animal protein, phosphorus, and salt (NaCl) as follows:
- (1) In poultry and swine feed in an amount not to exceed 5 percent by weight of the feed.
- (2) In feed concentrates for cattle in an amount not to exceed 10 percent by weight of the concentrate.
- (d) *Labeling*. The label and labeling shall bear, in addition to the other information required by the act:
- (1) The name of the additive, condensed animal protein hydrolysate.
- (2) Adequate directions for use including maximum quantities permitted for each species and a guaranteed analysis of the additive.

§573.220 Feed-grade biuret.

The food additive feed grade biuret may be safely used in ruminant feed in accordance with the following prescribed conditions:

(a) The food additive is the product resulting from the controlled pyrolysis of urea conforming to the following specifications:

	Percent
Mineral oil	55 minimum. 15 maximum. 30 maximum. 0.5 maximum. 35 minimum.

- (b) It is used in ruminant feeds as a source of nonprotein nitrogen.
 - (c) To assure safe use of the additive:
- (1) The label and labeling of the additive and that of any feed additive supplement, feed additive concentrate, feed additive premix, or complete feed prepared therefrom shall contain, in addition to other information required by the act, the following:
- (i) The name of the additive.
- (ii) The maximum percentage of equivalent crude protein from non-protein nitrogen.
- (2) The label shall recommend that the diet be balanced to provide adequate nutrients when equivalent crude protein from all forms of nonprotein nitrogen exceed one-third of the total crude protein in the total daily ration.

[41 FR 38652, Sept. 10, 1976, as amended at 68 FR 27904, May 22, 2003]

§ 573.225 1,3-Butylene glycol.

The food additive 1,3-butylene glycol (1,3-butanediol) may be safely used in accordance with the following prescribed conditions:

- (a) It complies with the specifications in §173.220(a) of this chapter.
- (b) It is intended for use in swine feed as a source of energy.
- (c) It is to be thoroughly mixed into feed at levels not to exceed 9 percent of the dry matter of the total ration.
- (d) 1,3-Butylene glycol should be mixed in feed with equipment adapted for the addition of liquids, and the feed should be mixed not less than 5 minutes after its addition.

[53 FR 40061, Oct. 13, 1988]